

Ten-Year Plan Consultation Meeting with Navajo Nation

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Agency for Toxic Substances and Disease Registry
Regional Director – Region 9

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Agency for Toxic Substances and Disease Registry

- A federal public health agency of the U.S. Department of Health and Human Services and based in Atlanta, Georgia.
- ATSDR protects communities from harmful health effects related to exposure to natural and man-made hazardous substances.
- We do this by responding to environmental health emergencies; investigating emerging environmental health threats; conducting research on the health impacts of hazardous waste sites; and building capabilities of our health partners.

Western Branch - Region 9

Region 9 Location



Region 9 includes Arizona, California, Hawaii, Nevada, Commonwealth of the Northern Mariana Islands (CNMI), U.S. Territory of Guam, Marshall Islands, Palau, American Samoa.

Region 9 Contacts

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ATSDR Goals for the 10-Year Plan

- Coordination between ATSDR and IHS to provide training to clinicians and other health care providers on health effects of non-occupational exposure to uranium and documentation of and taking an exposure history.
- Coordination with NNDOH to develop materials and provide training to CHRs. Training topics to include health effects of non-occupational exposure to uranium and other tools for effective health education and outreach (ex. Uranium 101 in the Community Outreach Network).
- Continue participation in the Community Outreach Network.

URANIUM in the Shiprock Area

Uranium is part of the earth. It is close to the surface throughout the southwest U.S. Uranium is part of the environment and is naturally occurring in soil and water. Uranium is also present in waste piles from uranium mines and mills. Exposure to uranium has health concerns for humans—some known, many unknown.

KNOW about mine and mill sites and contaminated water sources

There are abandoned uranium mines and mills on the Navajo Nation. There are contaminated water sources on the Navajo Nation.

- We cannot undo past contact with uranium.
- We can lessen contact with uranium now and in the future.

LEARN how to recognize mines and contaminated water sources

IF YOU SEE SIGNS LIKE THIS:



STAY AWAY from the area.

- Learn where uranium mines were located and stay away even if there are no signs.
- DO NOT build, play on, ride ATVs, or make corrals at mine sites.
- DO NOT gather plants, or take gravel, dirt, sand or water from mine sites.

IF YOU SEE SIGNS LIKE THIS:



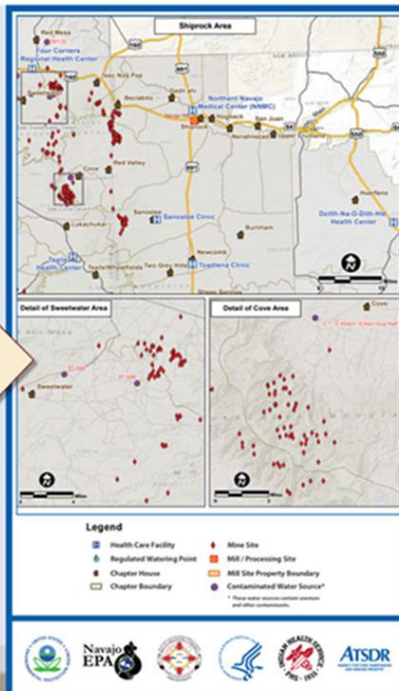
DO NOT use water from that source for human drinking, cooking or bathing. It is contaminated with uranium or other contaminants.

- DO NOT use contaminated water sources for human use, even if the water looks, smells and tastes good. Don't use water from contaminated sources for drinking, cooking, bathing or washing clothes or fruits and vegetables.
- ONLY use regulated water sources for human drinking, cooking or bathing. Regulated water sources are piped water in your home or regulated watering points (usually near Chapter Houses).

TEACH the location of mines and contaminated water sources

The map shows locations of abandoned uranium mines and contaminated water sources in this area.

- Stay away from mines. Mines can be dangerous to human health and safety.
- Only use regulated water sources for human drinking, cooking, and bathing.
- Livestock-use-only wells should not be used for human drinking, cooking, or bathing.



CARE for your family and yourself

Community-level exposure to uranium is not like the exposure of miners and millers, but it is still concerning for health. Exposure can occur by contact with contaminated soil, water, or radon gas. Here are suggestions to help decrease exposure and to promote good health:

SOIL

- Work and play away from mine sites.
- Do not gather gravel, sand or dirt near mine sites.
- Grow and gather plants away from mine sites.
- Grace livestock away from mine sites; if this is not possible, do not use parts where uranium concentrates—liver, kidneys and bones.

WATER

- If you have running water, use it. If you don't like the taste or color, try a filter.
- If you had water for human use, use only regulated watering points and use containers and hoses approved for human drinking water.
- Clean hoses and containers before each use.
- Separate hoses used for human water and livestock water.

RADON

- Radon is a radioactive gas that comes from uranium.
- Radon is dangerous in enclosed spaces and is the second leading cause of lung cancer.
- You cannot see, taste or smell radon. But you can test for it.
- Get your home tested for radon and keep it well ventilated until you get the results.

CARING FOR YOUR HEALTH

There is not a lot of research to tell us exactly what community-level exposure does to the human body. But there is some information from research on people and animals.

Uranium exposure:

- Can cause kidney damage.
- Is linked to increased risk of high blood pressure and autoimmune diseases.
- May increase risks of cancers.
- May increase reproductive problems.

So, it is very important for anyone exposed to uranium to do the following:

- Prevent or manage diabetes and high blood pressure with healthy weight, healthy diet, daily exercise, and taking any prescribed medications correctly every day.
- Prevent cancer by no tobacco, healthy weight, eating well, and keeping up to date on cancer screening tests—Pap tests, mammograms, colonoscopy.
- Get regular health care and ask your provider to check on kidney, thyroid, liver, and heart health and check for autoimmune diseases.

To get help with questions about...	Please call...
... Abandoned mines	Navajo Abandoned Mine Lands Window Rock at (505) 871-6962 Shiprock at (505) 368-1220 Tuba City at (505) 871-6962
... Radon in your home, radon test kits	Navajo Nation EPA Radon Program at (505) 871-7703/7963 or (888) 643-7692
... Water from an unregulated water source; locations of unregulated water sources	Navajo Department of Water Resources at (505) 729-4003 or Navajo Public Water Systems at (505) 871-7755
... Water from a regulated watering point or piped water in your home	Navajo Tribal Utility Authority at (800) 528-5011
... Safe water hauling practices	Navajo Public Water Systems at (505) 871-7755
... Contaminated structures	Navajo Nation EPA Superfund Contaminated Structures Program at (800) 314-1846
... Uranium medical screening and monitoring program	Community Uranium Exposure - Journey to Healing, Navajo Area HHS at (505) 368-6311
... 5 Year Plan, U.S. EPA cleanup activities	U.S. Environmental Protection Agency at (800) 231-3075 epa.gov/region8/superfund/navajo-nation



Uranium and Radiation on the Navajo Nation

BASICS

Quick FACTS

- Uranium is a natural metal element found in rock, soil, and water.
- Radiation is the release of energy and particles from uranium and certain other elements.
- If you have contact with high levels of uranium or radiation, it can cause health problems.
- Because of uranium mining in the past, some soil, water, rocks, and structures on the Navajo Nation have unsafe levels of uranium and radiation.
- You can take steps to protect yourself from contact with uranium.

What is uranium?

Uranium is a metal that exists naturally in the earth. There are small amounts of uranium in almost all the soil, rock, and water in the world. It can move through the environment in rain, wind, and other natural processes.

People have used uranium for building military shielding, weapons, planes and helicopters. It's also used to fuel nuclear weapons and nuclear power plants.

How can I come in contact with uranium, radiation or both?

People can come in contact with uranium, radiation or both on the Navajo Nation by spending time at abandoned uranium mines, living in a home that was built with material from a mine or mill site, drinking unregulated water, or not following good water hauling practices.

Everyone comes in contact with low levels of uranium because it's in the environment. But coming in contact with higher levels of uranium can be harmful to your health.

Here's some more detailed information about uranium on the Navajo Nation.



Uranium and Radiation on the Navajo Nation

YOUR HEALTH

Uranium can have chemical and radiological effects on the body.

Chemical effects

Uranium is a chemical that is found naturally in the earth in small amounts. But high levels of uranium in the body can affect organs and body processes.

Autoimmune function

High blood pressure

Kidney disease

Reproductive function

Radiation effects

Radiation is the release of energy and particles from uranium and certain other elements. It is found naturally in small amounts. But exposure to high levels of radiation can cause health problems such as cancer.

Lung Cancer

Kidney function

Bone cancer

More information and suggestions for staying healthy on the back page.



Uranium and Radiation on the Navajo Nation

REDUCE YOUR CONTACT

Uranium is found naturally in the earth in small amounts. In some areas, the uranium is found in amounts high enough to mine, such as on the Navajo Reservation. Because of uranium mining in the past, some soil, water, rocks, and structures on the Navajo Nation have unsafe levels of uranium.

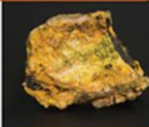
Contact with high levels of uranium can cause health problems — including kidney damage.

Radiation is a type of energy that comes from uranium and other natural materials such as radium and radon. Radiation is also found naturally in small amounts. There are unsafe levels of radiation on Navajo Nation because of past uranium mining.

Exposure to radiation can cause health problems such as cancer if people are exposed to it in large enough amounts.

Take steps to keep yourself safe:

- Stay away from abandoned mines and mills.
- Find out if your home is a contaminated structure.
- Use regulated water for human needs.
- Never use unregulated water for human needs — even if it looks ok.
- Use good water hauling practices to keep your water clean.



Uranium 101 WORKSHOP



SATURDAY, JUNE 22, 2019

10:30 a.m. to 3:00 p.m.

Mariano Lake Chapter House

The workshop will be offered in English with Navajo Interpretation.

Resource List 2020

Uranium and Radiation on the Navajo Nation

Topic	Agency, Program, and Location	Telephone Number
Mines and structures		
Cleanup of chemical and radiological hazards at abandoned uranium mines (AUM)	U.S. Environmental Protection Agency (EPA), Region 9 Superfund Program, San Francisco, California	(800) 231-3075 (505) 240-0093 Eastern AUM region Southern AUM region (480) 250-0990 Western AUM region North Central AUM region Northern AUM region Central AUM region Navajo Nation EPA (NNEPA), Navajo Superfund Program, Window Rock, Arizona
Contaminated structures	NNEPA, Navajo Superfund Program, Window Rock, Arizona — Contaminated Structures Program	(800) 314-1846
Address physical hazards to abandoned mine lands, i.e., copper, sand, and gravel pits	Navajo Abandoned Mine Lands (AML) Reclamation Uranium Mill Tailings Remedial Action (UMTRA) Department	(928) 871-8982 Window Rock (505) 368-1220 Shiprock (928) 283-3188 Tuba City
Radon in your home, radon test kits	NNEPA, Radon Program, Window Rock, Arizona	(928) 871-8790
Uranium mill sites		
Disposal sites—long-term surveillance and maintenance (LTS&M)	U.S. Department of Energy (DOE) Office of Legacy Management (LM), Grand Junction, Colorado	(970) 248-6621 Mexican Hat (970) 248-6018 Shiprock (970) 248-6018 Tuba City
Former processing site—LTS&M	U.S. DOE LM, Grand Junction, Colorado	(970) 248-6621 Monument Valley
Technical assistance, community outreach	Navajo AML Reclamation UMTRA Department, Window Rock, Arizona	(928) 871-8982
Disposal sites—general licensing and oversight	U.S. Nuclear Regulatory Commission (NRC), Washington, DC	(301) 415-8749
Former processing site—oversight	NRC, Washington, DC	(301) 415-8749
Health		
Preventive health information, uranium awareness posters	Navajo Department of Health (NDOH), Community Health Representative/Outreach Program, Window Rock, Arizona	(928) 871-8875
Uranium medical screening and monitoring program	Navajo Area Indian Health Service (NAIHS), Northern Navajo Medical Center, Community Uranium Exposure—Journey to Healing, Shiprock, New Mexico	(505) 368-7391 or (505) 368-7402
Provides local oncology care and provides assistance to coordinate care to patients. Navajo medical	Tuba City Regional Health Care Corporation, Specialty Care Center, Tuba City, Arizona	(928) 283-2402

Discussion and Consultation

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4770 Buford Highway NE, Chamblee, GA 30341

Telephone: 1-800-CDC-INFO (232-4636)/TTY: 1-888-232-6348

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